CLAIMS

1. An induction heating apparatus characterized in that it has;

a main frame composing an outer casing,

a top plate provided on the upper side surface of said main frame and having at least one loading part on which a cooking container to be heated is placed,

an induction heating means which is provided in the lower part of said loading part and is to heat said cooking container to be heated,

an infrared sensor which is provided in the neighborhood of said induction-heating means and receives the infrared radiation radiated from said cooking container to be heated, and outputs the detected signal corresponding to the amount of the infrared radiation.

a control board that detects the temperature of said cooking container to be heated based on said detected signal, and controls the output of said induction heating means,

a magneto-shielding member configured in a single unitary body including a cylindrical part

which covers the periphery of said infrared sensor and a side part which covers at least a part of said control board.

2. An induction heating apparatus of claim 1 characterized in that said cylindrical body is formed in a nearly coaxial structure of double configuration.

3. An induction heating apparatus of claim 2 characterized in that it has openings at a joint part of said cylindrical body positioned inside and said cylindrical body positioned outside.

4. An induction heating apparatus of claim 1 characterized in that the material of said magneto-shielding member is aluminum.

5. An induction heating apparatus of claim 1 characterized in that said magneto-shielding member is made of die-cast, and its inner surface is formed by the mirror-surface finishing.

6. An induction heating apparatus of claim 5 characterized in that the inner surface of said

cylindrical body is finished as the mirror-surface by the roller burnishing.

7. An induction heating apparatus of claim 1 characterized in that the distance between the upper side surface of said top plate and the upper side surface of said infrared sensor is in a range of 15 mm to 35 mm.

8. An induction heating apparatus of claim 1 characterized in that the thickness of said magneto-shielding member is in a range of 1.5 mm to 5 mm.

9. An induction heating apparatus of claim 1 characterized in that it further has a shield plate that covers nearly whole lower part of said control board.

10. An induction heating apparatus of claim 1 characterized in that said magneto-shielding member is grounded.

11. An induction heating apparatus of claim 9 characterized in that said magneto-shielding member and said shield plate are

grounded.

12. An induction heating apparatus of claim 1 characterized in that it further has a first resin cover which holds said magneto-shielding member, and

said first resin cover and said magneto-shielding member compose a nearly closed space in which said infrared sensor and said control board are stored.

13. An induction heating apparatus of claim 9 characterized in that it further has a first resin cover which holds said magneto-shielding member and said shield plate, and

said first resin cover, said magneto-shielding member and said shield plate compose a nearly closed space in which said infrared sensor and said control board are stored.

14. An induction heating apparatus of claim 1 characterized in that it further has a second resin cover which is placed between said infrared sensor and the circuit board on which the infrared sensor is installed, and which shields almost whole part of the circuit board

from the infrared radiation radiated from said cooking container to be heated.

15. An induction heating apparatus of claim 14 characterized in that said second resin cover holds said infrared sensor at a position of a specified height from said circuit board.

16. An induction heating apparatus of claim 12 characterized in that it further has a second resin cover having a holding plane on which said infrared sensor is placed, and said magneto-shielding member has a recessed portion which is opened toward the lower direction, said holding plane is positioned in said recessed portion, and the side planes and the base plane of a space defined by said second resin cover and said recessed portion is nearly closed.

17. An induction heating apparatus of claim 13 characterized in that it further has a second resin cover having a holding plane on which said infrared sensor is placed, and said magneto-shielding member having a recessed portion which is opened toward the lower direction, said holding plane is positioned in

said recessed portion, and the side planes and the base plane of a space defined by said second resin cover and said recessed portion is nearly closed.

18. An induction heating apparatus of claim 1 characterized in that said infrared sensor is placed at the central part of said induction heating means which is arranged spirally, and ferrites are provided between said induction heating means and said infrared sensor.